

analyzed utilizing an internet protocol ping.

27. The hybrid network as recited in claim 25, wherein the topology of the hybrid network is analyzed utilizing an internet protocol trace route.

28. The hybrid network as recited in claim 25, wherein the topology of the hybrid network is analyzed utilizing an internet protocol packet latency.

29. The hybrid network as recited in claim 25, wherein the topology of the hybrid network is analyzed utilizing a packet echo.

30. (canceled)

REMARKS

In response to the final Office Action dated March 22, 2000, no claims are amended, claims 24 and 30 are cancelled, and no claims are added. Therefore, claims 19-23 and 25-29 remain active in this application, and of those, claims 19 and 25 are independent. Reconsideration and allowance of this application is respectfully requested in view of the amendments above and the discussion below.

Specification

Applicants previously presented amendments to the specification to correct grammatical and typographical errors thereto. In response, a substitute specification was requested.

It is respectfully requested that the amendments be entered since a substitute specification would require the submission of the original 637 page specification with the amendments shown in addition to a replacement specification totaling more than 637 pages.

Up to this point in the prosecution of this application and other applications claiming priority to the same specification, no substitute specification has been required. It is respectfully urged that if a substitute specification is required in this case, the other cases will also request substitute specifications. Therefore, the over 1200 pages (in addition to the original 637 pages) will be required for each of the still pending applications. Thus, applicants respectfully request the amendments be entered in order to conserve resources (e.g., sheets of paper and storage space), which would otherwise be needlessly be expended in fulfilling the request.

Serial No.: 08/746,901
Examiner: S. Nguyen

It is further noted that applicants' representative has spoken to a Supervisory Legal Instruments Examiner in response to a similar request in a separate case in order to emphasize the wastefulness of such a request. If a similar conversation would be warranted in this case, applicants' representative would be happy to follow-through with whomever is designated as the appropriate person.

Claim Rejection under 35 U.S.C. § 103

In section 5, the Office Action rejected the claims under 35 U.S.C. § 103 as being unpatentable over the article entitled "INETPhone: Telephone Services and Servers on Internet" by C. Yang (the Yang reference) in view of U.S. Patent No. 5,7726,948 to Kubler et al. (the Kubler reference). After careful consideration of the references, Applicants traverse the rejection on the grounds that the references fail to disclose or suggest the requirements of the claims.

Independent claim 19 requires transmitting a query including a type of call service to the directory service to obtain a plurality of gateways between the packet switched network and circuit switched network that match the predefined call service criteria; querying each of the plurality of gateways to determine a network topology to service the call; ranking the plurality of gateways based on the network topology and the call service criteria; translating an identifier of a destination of the call from a listing of telephone numbers and associated internet protocol addresses in the directory service; and routing the call over the selected gateway.

One embodiment of claim 19 is shown in the specification in Figure 1F. As stated in the specification with reference to Figure 1F, at page 211, line 13 through page 212, line 20:

"Figure 1F is a block diagram of a hybrid (internet-telephony) switch in accordance with a preferred embodiment . . . The hybrid internet telephony switch 221 grows out of the marriage of router architectures with circuit switching architectures . . . The selection of the outgoing network interface is made on the basis of routing tables. The switch 221 may also query an external Service Control Point (SCP) 276 on the internet to request routing instructions. Routing instructions, whether derived locally on the switch 221 or derived from the SCP 276, may be defined in terms of a subnet to use to reach a particular destination.

Like a router, each of the network interfaces in the switch 221 is labeled with

a subnet address. Internet Protocol (IP) addresses contain the subnet address on which the computer is located. PSTN addresses do not contain IP subnet addresses, so subnets are mapped to PSTN area codes and exchanges. The switch 221 selects routes to IP addresses and PSTN addresses by selecting an interface to a subnet which will take the packets closer to the destination subnet or local switch." (emphasis added.)

Other embodiments and support for the present invention are found elsewhere in the specification as well.

The present invention thus provides a **seamless connection over the hybrid network**. Because the internet telephony gateway uses the dialed number of a call to translate the call into an internet protocol address, the **user need only dial the destination phone number and does not even have to know that the call is routed over the hybrid network rather than the PSTN**.

In contrast to the present invention, the Yang reference nowhere discloses, *inter alia*, the requirements of claim 19 of "transmitting a query including a type of call service to the directory service to obtain a plurality of gateways between the packet switched network and circuit switched network that match the predefined call service criteria" and "**translating an identifier of a destination of the call from a listing of telephone numbers and associated internet protocol addresses in the directory service.**" At page one, section 2, the Yang reference describes the INETPhone service. It states:

Assuming a user at area A wants to call another user in area B. The user first makes a local call to an INETPhone server in area A. After the connection, the user keys in the remote phone number in area B to the server. Then the server in area A makes a connection to another INETPhone server in area B, and requests the remote server to dial, as a local call, the phone number in area B.

As described above, there is no translation of the destination number of the call in the Yang reference. The destination number of the call is the INETPhone server in area A. The caller must input the remote phone number to area B and this number is used to route the call. Thus, the user in area A must dial the server first rather than having a seamless connection over a hybrid network.

Section 6 of the Office Action states that Yang discloses "mapping information at DS will

be disseminated to INETPhone servers for the search of a remote server in response to a requested phone call.”

However, this directory server does not “translat[e] an identifier of a destination of the call from a listing of telephone numbers and associated internet protocol addresses in the directory service”, as required by claim 19. The directory server “maps between IP address and area code of INETPhone servers . . .” Only the IP address and area code of INETPhone servers are translated. There is no translation of the destination number. Thus, the Yang reference fails to teach or suggest the aspects of claim 19 quoted above.

Furthermore, the Kubler reference fails to add to the teachings of the Yang reference to meet the requirements of the claim 19. Similar to the Yang reference, the Kubler reference nowhere discloses, *inter alia*, the requirements of claim 19 of “transmitting a query including a type of call service to the directory service to obtain a plurality of gateways between the packet switched network and circuit switched network that match the predefined call service criteria” and “translating an identifier of a destination of the call from a listing of telephone numbers and associated internet protocol addresses in the directory service.”

The Kubler reference was merely asserted as teaching deficiencies in the Yang reference. As stated by the Examiner in section 5 of the Office Action, Yang fails to disclose “querying each of the plurality of gateways to determine a network topology to service a call; ranking the plurality of gateways based on the network topology and the call service criteria”. The Office Action relied on the Kubler reference for this aspect, but never even asserted the Kubler reference teaches or suggests the aspect of claim 19 quoted above as the Kubler reference does not teach or suggest “translating an identifier of a destination of the call from a listing of telephone numbers and associated internet protocol addresses in the directory service.”

Since the prior art taken alone or in combination fails to teach or suggest the language of claim 19 quoted above, the references do not establish a *prima facie* case of obviousness.

Independent claim 25 recites similar features, and is similarly non-obvious. Specifically, claim 25 recites “accessing the directory service to match an identifier of a destination of the call to an associated internet protocol address.” As such, it is respectfully urged that the rejection of these independent claims, and the claims dependent thereon, be reconsidered and withdrawn, and an indication of allowability be provided.

Serial No.: 08/746,901
Examiner: S. Nguyen

In addition, the Yang and Kubler references in combination with the Examiner's official notice fails to suggest the requirements of claims 20-23 and 26-29 under 35 U.S.C. §103(a). Examiner's official notice merely notes that the use of "a PING, trace, echo, and latency are well known in the art to determine network topology." Assuming, *arguendo*, that this is known, there is no teaching or suggestion in the prior art for combining these aspects with either the Yang reference or the Kubler reference (nor with a Yang/Kubler combination) to arrive at applicants' invention.

In order to provide a proper basis for rejecting a claim as obvious, there must be some teaching or suggestion in the prior art for making the modification. However, no teaching or suggestion has been identified, and none is present in the cited references.

It is respectfully noted that the MPEP indicates that "[i]f the Applicant traverses an Examiner's assertion [of well known prior art] the examiner should cite a reference in support of his or her position." MPEP 2144.03. Applicant respectfully submits that it may be true that "a PING, trace, echo, and latency" may be known, but not as recited in combination with claim 19 of the present invention which is neither taught or suggested by the prior art of record. "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on application disclosure." MPEP 2142, rev. July 1998, pages 2100-2110. Therefore, it is respectfully requested that the rejection be reconsidered and withdrawn, and claims 20-23 and 26-29 be allowed.

For the reasons stated above, it is respectfully urged that the rejection of claims 19-23 and 25-29 under 35 U.S.C. § 103 be reconsidered and withdrawn, and the claims be allowed. The remaining references which were cited but not applied have been reviewed, but are not believed to be pertinent to the patentability of the present invention.

Conclusion

Having fully responded to the Office Action, it is urged that all the claims currently pending patentability distinguish over the prior art and the application is in condition for allowance. Therefore, an indication of allowability is respectfully solicited. However, if there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicant's attorney at the telephone number shown below.

Serial No.: 08/746,901
Examiner: S. Nguyen

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 13-2491 and please credit any excess fees to such deposit account.

Respectfully submitted,

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